REMARKS

This responds to the Office Action mailed on October 16, 2008.

Claims 1-6, 8-9, and 11-12 are amended, claim 7 is canceled, and no claims are added; as a result, claims 1-6 and 8-12 are now pending in this application. Amendments to claims are made to clarify antecedent bases of certain claim elements and co correct typographical errors.

Claim Objections

Claims 7 and 8 were objected to for the following informalities: Claim 7 immediately recites "machine readable medium" and should be corrected to recite either "a machine readable medium" or The machine readable medium." Claim 8 recites "an system" and should be corrected to read "a system." Claim 7 was cancelled. Claim 8 was amended. It is respectfully requested that the objection to claim 8 be withdrawn.

§101 Rejection of the Claims

Claim 7 was rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claim 7 is cancelled. Accordingly, this rejection is moot.

§112 Rejection of the Claims

Claim 7 was rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate description or enablement. Claim 7 is cancelled. Accordingly, this rejection is also moot.

§103 Rejection of the Claims

Claims 1 and 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wells et al. (U.S. 2003/0086341 A1) in view of Seok et al. (U.S. 2002/0078359 A1).

The Office Action cites Wells to show extracting a fingerprint from a media signal. Wells does not disclose or suggest using an autocorrelation function for any purpose. The Office

Action turns to Seok to show elements of claim 1 that recite autocorrelation or use the results of autocorrelation.

Seok, titled "Apparatus for Embedding and Detecting Watermark and Method Thereof," uses short-time autocorrelation for detecting the watermark in a watermarked audio signal. (Seok, Abstract.) A watermark is auxiliary information (e.g., metadata) embedded into an information signal, while a fingerprint of an information signal is generated based on characteristic components of the information signal itself. At [0031], Seok describes calculating autocorrelation of the inputted signal. Claim 1 recites not just an auto-correlation function, but also the input to an autocorrelation function - a sequence of samples of a given perceptual property of a media signal extracted from the signal or "the sequence of samples." While Seok discloses calculating autocorrelation of an inputted signal, the inputted signal in Seok is a combination of residual signals of the original audio signal and the delayed audio signal, which is distinct from the "sequence of samples of a given perceptual property of the media signal " recited in clam 1. Seok, thus fails to disclose or suggest "subjecting the sequence of samples to an auto-correlation function to obtain a sequence of auto-correlation values" recited in claim 1, whether considered separately or in combination with Wells.

Furthermore, because Seok is not concerned with deriving a binary sequence constituting a fingerprint of a media signal, the operation of "representing the results of said comparisons by respective bits of the fingerprint" is meaningless in the context of Seok. Additionally, in Seok, autocorrelation is used for the purpose of extracting a watermark (that involves identifying information that has been added to the original signal), which is unrelated to deriving a binary sequence constituting a fingerprint (that involves examining the original signal itself). The Office Action cites obtaining an error-corrected watermark (copyright information) utilizing short-time autocorrelation and a sign detector (Seok, [0032]) to show this feature of claim 1. A method of extracting a fingerprint from a media signal by representing results of comparisons of auto-correlation values with respective thresholds by respective bits of said fingerprint is distinct from utilizing autocorrelation to detect a watermark, even if such method of detecting a watermark in combined with fingerprinting techniques that do not utilize an autocorrelation function (as in Wells).

Thus, because Seok and Wells, whether considered separately or in combination fail to disclose or suggest the features of "subjecting the sequence of samples [of a given perceptual property of the media signal] to an auto-correlation function to obtain a sequence of auto-correlation values," "comparing auto-correlation values from the sequence of auto-correlation values with respective thresholds," and "representing the results of said comparisons by respective bits of the fingerprint," recited in claim 1, claim 1 and its dependent claims are patentable in view of the combination of Seok and Wells and should be allowed.

Claim 6 recites "means for subjecting the sequence of samples [of a given perceptual property of the media signal] to an auto-correlation function to obtain a sequence of auto-correlation values," "means for comparing auto-correlation values from the sequence of auto-correlation values with respective thresholds," and "means for representing the results of said comparisons by respective bits of the fingerprint." Thus, claim 6 is patentable in view of the combination of Seok and Wells and should be allowed for at least the reasons articulated with respect to claim 1.

Claim 8 recites "an auto-correlator to subject the sequence of samples to an auto-correlation function to obtain a sequence of auto-correlation values" and "a comparator to: compare auto-correlation values from the sequence of auto-correlation values with respective thresholds, and represent the results of said comparisons by respective bits of the fingerprint." Thus, claim 8 is patentable in view of the combination of Seok and Wells and should be allowed for at least the reasons articulated with respect to claim 1.

Claims 2-3, and 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wells et al. (U.S. 2003/0086341 A1) in view of Seok et al. (U.S. 2002/0078359 A1) and further in view of Hannigan et al. (U.S. 6,674,876 B1). As explained above, Seok and Wells, whether considered separately or in combination fail to disclose or suggest the features of "subjecting the sequence of samples to an auto-correlation function to obtain a sequence of auto-correlation values," "comparing auto-correlation values from the sequence of auto-correlation values with respective thresholds," and "representing the results of said comparisons by respective bits of the fingerprint" that are present in claims 2-3 by virtue of their being dependent on claim 1. Hannigan, titled "Watermarking in the Time-Frequency Domain," also fails to disclose or

suggest these features, whether considered separately or in combination with Wells and Seok. Thus, claims 2 and 3 are patentable in view of the combination of Seok, Wells, and Hannigan and should be allowed.

Claims 9-10 include "an auto-correlator to subject the sequence of samples to an auto-correlation function to obtain a sequence of auto-correlation values" and "a comparator to: compare auto-correlation values from the sequence of auto-correlation values with respective thresholds, and represent the results of said comparisons by respective bits of the fingerprint " by virtue of being dependent on claim 8. Thus, claims 9 and 10 are patentable in view of the combination of Seok, Wells, and Hannigan and should be allowed for at least the reasons articulated with respect to claims 2-3.

Claims 4 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wells et al. (U.S. 2003/0086341 A1) in view of Seok et al. (U.S. 2002/0078359 A1) and further in view of Kenyon et al. (U.S. 2002/0023020 A1). As discussed above, the combination of Seok and Wells fails to disclose or suggest the features of claims 1 and 8 that are present in claims 4 and 11 by virtue of their being dependent on claims 1 and 8 respectively. Kenyon, whether considered separately or in combination with Seok and Wells, also fails to disclose or suggest these features. Therefore, claims 4 and 11 are patentable in view of the combination of Seok, Wells and Kenyon and should be allowed.

Claims 5 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wells et al. (U.S. 2003/0086341 A1) in view of Seok et al. (U.S. 2002/0078359 A1) and further in view of Hobson et al. (U.S. 6,633,653 B1). As discussed above, the combination of Seok and Wells fails to disclose or suggest the features of claims 1 and 8 that are present in claims 5 and 12 by virtue of their being dependent on claims 1 and 8 respectively. Hobson, whether considered separately or in combination with Seok and Wells, also fails to disclose or suggest these features. Therefore, claims 5 and 12 are patentable in view of the combination of Seok, Wells and Hobson and should be allowed.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (408) 278-4052 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date February 16, 2009 By _____

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 16, 2009.

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